

P1-484 SOCIO-CULTURAL BELIEFS AND SEXUAL ACTIVITY AMONG POST-MENOPAUSAL WOMEN IN IBADAN NORTHEAST LOCAL GOVERNMENT AREA, NIGERIA

doi:10.1136/jech.2011.142976g.73

O Omobowale,* M Onadeko, E Owoaje. *University College Hospital, Ibadan Oyo State, Nigeria*

Little or no work has been done on sociocultural beliefs and sexual activity of postmenopausal women in Nigeria. This study was carried out to assess socio-cultural beliefs and sexual activity among postmenopausal women in Ibadan NorthEast Local Government Area. A cross-sectional study was conducted among 522 postmenopausal women aged 40–65 years. An interviewer-administered questionnaire was used to collect data on sociodemographic characteristics, attitude to sociocultural beliefs regarding sexual activity and current sexual activity of respondents. Descriptive χ^2 and logistic regression were used for data analysis. The mean age of the respondents was 54.0 ± 5.6 years. Overall, 45.7% agreed with at least one of the stated socio-cultural beliefs and the mean attitudinal score was 4.1 ± 3.2 . Among those who currently had partners, only 30.7% reported post-menopausal sexual activity. Significantly higher proportions of those with no formal education (78.6%), those aged ≥ 50 years (69.9%) and with supportive attitude towards the socio-cultural beliefs (83.8%) reported cessation of post-menopausal sexual activity ($p < 0.05$). The significant predictors for cessation of post-menopausal sexual activity were no formal education (OR=4.1, 95% CI from 2.0 to 8.3), supportive attitude towards socio-cultural beliefs (OR=5.6, 95% CI from 3.4 to 9.4) and older age group (OR=4.1, 95% CI from 2.4 to 7.0). Socio-cultural beliefs affected post-menopausal sexual activity among these women; this may result in their partners seeking for alternative sexual partners with the attendant problems of sexually transmitted infections. There is need for the development of educational interventions targeted at changing these beliefs.

P1-485 EXPANDING BETWEEN-SCHOOL DIFFERENCES IN SMOKING PREVALENCE OF HIGH SCHOOL STUDENTS IN JAPAN

doi:10.1136/jech.2011.142976g.74

¹Y Osaki,* ²T Ohida, ³H Kanda, ¹T Kishimoto, ⁴T Tanihata, ²Y Kaneita. ¹Tottori University, Faculty of Medicine, Yonago, Tottori, Japan; ²Nihon University, Itabashi, Tokyo, Japan; ³Fukushima Medical University, Fukushima, Fukushima, Japan; ⁴National Institute of Public Health, Wako, Saitama, Japan

Purpose Trends in school-based differences of smoking prevalence among high school students in Japan was analysed to assess social inequalities in health among adolescents.

Methods Cross-sectional nationwide surveys were conducted periodically. High schools were randomly sampled from throughout Japan in 1996, 2000, 2004, and 2008. All enrolled students in sampled schools were asked smoking and drinking behaviour. The number of schools participated in the survey was 80 junior high schools and 73 senior high schools in 1996 survey. The values were 99 and 77 in 2000, 92 and 87 in 2004, and 92 and 80 in 2008 survey, respectively. For assessing the differences in prevalence, the coefficient of variation (CV) was used.

Results Smoking prevalence among students has decreased for both sexes. According to the lowering smoking prevalence, the variance of between-school differences in smoking prevalence has shrunk, however CV of the experiment rate, current smoking (smoked at least 1 day of the 30 days preceding the survey), and daily smoking has increased for both sexes and both junior and senior high school. For example, CV of current smoking in junior high school boys was

0.51 in 1996, 0.52 in 2000, 0.66 in 2004, and 0.92 in 2008. The CV in junior high school girls was 0.62 in 1996, 0.63 in 2000, 0.93 in 2004, and 0.95 in 2008.

Conclusions Although the average (mean or median) of smoking prevalence by school decreased, the between-school differences have increased. This suggests that expansion of social inequalities in adolescent health may be occurring

P1-486 PREOPERATIVE BODY MASS AND RISK OF COMPLICATIONS AFTER HYSTERECTOMY ON BENIGN INDICATIONS

doi:10.1136/jech.2011.142976g.75

¹M Osler,* ^{1,2}S Daugbjerg, ¹B Frederiksen, ²B Ottesen. ¹Research Center for Prevention and Health, Copenhagen, Glostrup, Denmark; ²Department of Gynaecology, Rigshospitalet, Copenhagen, Denmark

Introduction This study examines preoperative Body Mass Index (BMI) in relation to risk of complications after hysterectomy on benign indications, and explores whether any associations vary by route of surgery.

Methods A cohort study which includes data on health and lifestyle collected prospectively by the surgeon whenever a woman was referred for hysterectomy on a benign indication in Denmark from 2004 to 2009. Logistic regression was used to investigate associations of BMI with complications reported at surgery or during the first 30 days postoperative.

Results Of the 20 353 women with complete data, 6.0% had a BMI < 20 kg/m², 31.9% with BMI between 25 and 30 kg/m², were classified as overweight and 17.5% as obese with a BMI ≥ 30 kg/m². The rate of complications was 17.6% with bleeding being the most common specific complication (6.8%). After adjustment for age, ethnicity, education, smoking, indication for surgery, uterus weight, ASA-classification, co-morbidity status, and route of hysterectomy, obesity was associated with increased risk of bleeding (OR=1.27 (1.08–1.48)) and infections (OR=1.47 (1.23–1.77)). The risks of bleeding (OR=1.48 (1.28–1.82)) and re-operation (OR=1.67 (1.28–2.17)) were also increased among women with a BMI < 20 . The U-shaped relation between BMI and bleeding, and between high BMI and infections were only seen for the abdominal route. The risk of infections was elevated among women with BMI < 20 who underwent laparoscopic surgery.

Conclusion Obesity increases the risks of bleeding and infections after abdominal hysterectomy. A BMI below 20 seems to increase the risks of bleeding and infection after abdominal and laparoscopic hysterectomy, respectively.

P1-487 COMBINED INFLUENCE OF PHYSICAL ACTIVITY AND HIP CIRCUMFERENCE ON ALL-CAUSE MORTALITY

doi:10.1136/jech.2011.142976g.76

^{1,2}J Østergaard,* ³M Grønbaek, ⁴L Ångquist, ⁵P Schnorr, ⁴T Sørensen, ⁴B Heitmann. ¹Department of Cardiology, Center for Cardiovascular Research, Aalborg Hospital, Aarhus University Hospital, Aalborg, Denmark; ²Department of Epidemiology, School of Public Health, Aarhus University, Aarhus, Denmark; ³National Institute of Public Health, University of Southern Denmark, Copenhagen, Denmark; ⁴Institute of Preventive Medicine, Copenhagen University Hospitals, Copenhagen, Denmark; ⁵The Copenhagen City Heart Study, Epidemiological Research Unit, Bispebjerg University Hospital, Copenhagen, Denmark

Introduction Hip circumference has been shown to be inversely associated with mortality. Reduced femoral fat or muscle atrophy in the gluteofemoral region in those with narrow hips has been proposed as explanations and thus, physical activity is likely to play an important role. The aim was to estimate the combined effects of

hip circumference and leisure-time physical activity on all-cause mortality.

Methods We used a prospective population design with approximately 14 years' follow-up and estimated the HRs of all-cause mortality for combinations of physical activity and hip circumference. 3120 men and 4068 women aged 21 to 92 years without pre-existing diagnosis of diabetes, stroke, ischaemic heart disease, or cancer in 1991–1994 and with complete information on the variables of interest were included. They were followed until 2009 in the Danish Civil Registration System, with 1.5% loss to follow-up and 2334 deaths.

Results Hip circumference was inversely associated with all-cause mortality irrespective of physical activity. However, physical activity seemed to counterbalance some of the adverse health effects of a small hip circumference, with the excess mortality in the lower quartile of hip circumference being reduced by 41% in men (HRdiff: 1.41, 95% CI 1.14 to 1.74) and 40% in women (1.40, 1.14 to 1.71) when comparing physically inactive with the active. These associations were observed after adjustment for waist circumference, height, and weight change in the 6 months before the examination.

Conclusion A small hip circumference appears hazardous to survival. However, being physically active may counterbalance some of the hazardous effects of a small hip circumference.

P1-489 PREVALENCE AND DETERMINANTS OF SOLITARY PULMONARY NODULES DETECTED USING THORACIC IMAGING TESTS DURING ROUTINE CLINICAL PRACTICE

doi:10.1136/jech.2011.142976g.77

^{1,2}B Lumberras, ³I Gonzalez-Alvarez, ⁴J Vilar, ^{1,2}L A Parker, ^{1,2}M A Pastor, ¹N Gomez-Saez, ³F Lorente, ⁴M L Domingo, ³L Perez, ³N Picazo. ¹Department of Public Health, Alicante, Community of Valencia, Spain; ²CIBERESP (CIBER in Epidemiology and Public Health), Barcelona, Cataluña, Spain; ³Radiodiagnostic Service, San Juan de Alicante Hospital, Alicante, Community of Valencia, Spain; ⁴Radiodiagnostic Service, Dr Pesset Hospital, Valencia, Community of Valencia, Spain

Introduction The finding of a solitary pulmonary nodule (SPN) (<3 cm) in routine radiological examination may represent an early stage of lung cancer or a benign lesion, where any further diagnostic procedures may pose an unnecessary risk to patient health. Although SPNs have been described in high risk populations, their frequency in routine clinical care has not been determined.

Methods 4681 consecutive patients ≥ 35 years referred for a thoracic imaging test in two hospitals in the Community of Valencia, Spain in 2010 were included. Six expert radiologists independently classified each imaging report according to the presence or absence of a SPN. Other variables, such as patient demographics diagnosis suspicion, smoking habit, the referral clinical department, type of radiological test performed, and clinical setting were ascertained from medical records. The association between SPNs and patient/clinical characteristics was assessed with unconditional logistic regression.

Results SPNs were observed in 351 patients (7.5%) and their prevalence varied according to patient characteristics and the referral department, with oncology (15.4%), primary care (10.7%) and pneumology (9.8%), being the highest. After controlling for other factors, SPNs were more common in men (aOR 1.47, 95% CI 1.25 to 1.75), and in smokers (aOR 1.62, 95% CI 1.41 to 1.82).

Conclusions At least one in every 13 patients undergoing a thoracic imaging test during routine clinical care will show a SPN. The follow-up of these patients is needed in order to estimate their predictive value for lung cancer, and avoid the initiation of an unnecessary cascade of clinical procedure in benign lesions.

P1-490 SOCIOECONOMIC INEQUALITIES IN HEIGHT, LEG LENGTH AND TRUNK LENGTH AMONG CHILDREN AGED 6.5 YEARS AND THEIR PARENTS FROM THE REPUBLIC OF BELARUS: EVIDENCE FROM THE PROMOTION OF BREASTFEEDING INTERVENTION TRIAL (PROBIT)

doi:10.1136/jech.2011.142976g.78

¹R Patel, ^{1,2}D A Lawlor, ³M S Kramer, ^{1,2}G D Smith, ⁴N Bogdanovich, ⁴L Matush, ^{1,2}R M Martin. ¹School of Social and Community Medicine, University of Bristol, Bristol, UK; ²MRC Centre for Causal Analyses in Translational Epidemiology (CAITE), University of Bristol, Bristol, UK; ³Department of Pediatrics and Department of Epidemiology, Biostatistics and Occupational Health, McGill University Faculty of Medicine, Montreal, Canada; ⁴The National Research and Applied Medicine Mother and Child Centre, Minsk, Belarus

Introduction Lower socioeconomic position is associated with shorter stature, in particular shorter leg length, but the magnitude of these associations in non-Western countries has received little attention.

Aim To examine socioeconomic differentials in height, leg and trunk length in 6.5 year olds from the Republic of Belarus and compare these to differentials in parental height.

Methods We used data from a cohort of 13 889 children born in Belarus between June 1996 and December 1997 to investigate associations of parental educational attainment and highest household occupation with: a) measured child standing height, trunk and leg length at age 6.5 years; and b) the parents' reported standing height. Multivariable linear regression was used to examine associations.

Results Children from non-manual households were 1.1 cm (95% CI 0.8 to 1.3 cm) taller than those from manual households. Mothers and fathers from non-manual backgrounds were 0.7 cm (0.5 to 0.8) and 1.8 cm (1.6 to 2.0) taller than those from manual backgrounds, respectively. Associations with higher parental educational attainment were similar. The magnitudes of the associations of socioeconomic position with leg length were similar to those with trunk length. Adjusting for mid-parental height and number of older siblings attenuated children's associations markedly.

Conclusions In Belarus, similar socioeconomic differentials in height were observed in both children and their parents. Among children height differentials were partly explained by mid-parental height and number of older siblings. Leg length was not a more sensitive indicator of childhood socioeconomic conditions than trunk length.

P1-491 SOCIO-ECONOMIC VARIATION IN THE USE OF CT SCANS IN YOUNG PEOPLE IN THE NORTH OF ENGLAND, 1990–2002

doi:10.1136/jech.2011.142976g.79

¹M Pearce, ¹J Salotti, ²K McHugh, ³K P Kim, ¹A Craft, ⁴J Lubin, ⁴E Ron, ⁵L Parker. ¹Newcastle University, Newcastle upon Tyne, UK; ²Great Ormond Street Hospital, London, UK; ³Kyung Hee University, Gyeonggi-Do, Republic of Korea; ⁴National Cancer Institute, Bethesda, Maryland, USA; ⁵Dalhousie University, Halifax, Nova Scotia, Canada

Introduction Social patterning is known to influence health throughout life. In childhood, studies have shown increased injury rates in more deprived settings. Through this, it is also possible that socio-economic status may be related to rates of undergoing certain medical procedures with relatively high radiation doses, such as computed tomography (CT) scans. This study aimed to assess socio-economic variation among young people having CT scans in the North of England between 1990 and 2002.

Methods Electronic data were obtained from Radiology Information Systems of all nine National Health Service hospital Trusts in the region. Data related to CT scans, including sex, date of scan, age at scan, number and type of scans were assessed in relation to quintiles of Townsend deprivation scores, obtained from linkage of postcodes with UK census data.